

ABSTRACT OF THE DISCLOSURE

An optimized dispatch plan generator for generating an optimized dispatch plan for distributed resources in electrical power systems is based on economic and engineering considerations. The dispatch plan generator comprises several subsystems preferably including an energy management subsystem, an energy trading subsystem, an asset management subsystem, a reliability subsystem and a network analysis subsystem integrated with multiple artificial intelligence agents in one embodiment and with a module employing probabilistic techniques in another embodiment. The dispatch plan generator generates one or more solutions identifying the optimal mix and use of distributed resources and also generates a set of reports and graphs for the optimized solution plan.